Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268-1054

308 Building/2A January 15, 2003



Document Processing Desk - 6(a)(2) Office of Pesticide Programs - 7504C U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington, DC 20460-0001

RE: FIFRA § 6(a)(2) Report

Vikane\* Gas Fumigant

EPA Registration Number: 62719-4 Active Ingredient: Sulfuryl Fluoride CAS Registry Number: 002699-79-8

DERBI Number: 129180

State: FL

Severity Category: H-C

Dow AgroSciences submits the following information in response to its understanding of the U.S. Environmental Protection Agency's interpretation of FIFRA § 6(a)(2). However, Dow AgroSciences has not concluded that this information regards an "unreasonable adverse effect on the environment" or that it is reportable under FIFRA § 6(a)(2).

Dow AgroSciences received the enclosed information regarding alleged human exposure.

It is important to note that the Vikane Gas Fumigant label requires the introduction of chloropicrin to the structure prior to furnigation at a rate of one ounce per 10,000-15,000 feet (17-25 ppm) to serve as a warning agent. This warning agent causes smarting of eyes, tearing, throat and nose irritation, and a disagreeable pungent odor at very low concentrations (ca. 0.3 ppm).

The Vikane Gas Fumigant label states the following: "When fumigating, observe local, state and federal rules and regulations including such things as use of chloropicrin, clearing devices, positive-pressure self contained breathing apparatus, security requirements, and placement of warning signs:... Extremely Hazardous Liquid and Vapor Under Pressure, Inhalation of Vapors may be Fatal." Under the "Preparation for Fumigation" section of the label, the use directions for structural fumigation state "Remove from the structure to be furnigated all persons, domestic animals, pets - including fish and desirable growing plants." Also, under the Aeration and Reentry section of the label, use directions state "... treated area must be aerated until the level of sulfuryl fluoride is 5 ppm or less, as measured by a detection device with sufficient sensitivity such as an INTERSCAN or MIRAN gas analyzer." Within this section of the label it further states "Do not reoccupy fumigation site, i.e. building, ship, vehicle or chamber, nor move vehicle until aeration is complete."

If you wish to discuss this matter further, please call us.

Regards.

**EH&S Global Product Leader** 

(317) 337-4983

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Prepared by:

**Product Stewardship Administrator** 

(317) 337-4577

## Voluntary Industry Reporting Form for 6(a)(2) Adverse Effects Incident Information

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 1of 3 Row 1 Reporter Name Contact person (if different than reporter) Submission Internal ID date. 1-6720043 Administrative Data Address Address Phone # Phone # Location and date of incident Was incident part of larger study? No Incident Status: Date registrant Hollywood became aware of New Florida incident. 12/7/02 12/9/02 Row 2 EPA Registration # (Product 1) EPA Registration # (Product 2) EPA Registration # (Product 3 Pesticide(s) 62719-4 Involved A.I. (s) A.I. (s) A.I. (s) Sulfuryl Fluoride Product 1 name Product 2 Name Product 3 Name Vikane Exposed to concentrate prior to Exposed to concentrate prior to Exposed to concentrate prior to dilution? No dilution? dilution? Formulation Formulation **Formulation** Evidence label Row 3 Incident site: (examples include home, yard, Situation (act of using product): directions were not school, industrial, nursery/greenhouse, (examples include mixing/loading, followed? No surface water, commercial turf, reentry, application, transportation, repair/ Incident maintenance of application equipment, Circumstances Intentional misuse? No building/office, forest/ woods, agricultural (specify crop) right-of-way (rail, utility, manufacturing/ formulating). highway)). Applicator certified Re-entry PCO? Not applicable Own Residence How exposed: (examples include direct contact with treated surface, ingestion, spill, drift, runoff) See Incident Description

Brief description of incident circumstances.

12/9/02 1:42:28 PM no epa

HX: Caller's house tented. Husband and caller came back when given all clear by PCO. Both people started having eye irritation and tearing. Opened windows and sxs cleared in <2 hrs.

Prior to tenting, caller developed a chest cold. Caller also has multiple chemical sensitivity, chronic fatigue syndrome, fibromyalgia, allergies (to everything) and asthma.

After eye's cleared, caller (pt K) started having resp irritation, difficulty breathing, SOB, wheezing. Finally went to ER for MD eval and treatment (breathing treatments and unknown medications)

A: Discussed that the chloropicrin is a lacrimator added to the Vikane process as a warning agent, since Vikane is colorless/odorless gas. Chloropicrin is a strong acute irritant and can cause eye tearing and irritation. As noted, this cleared up with fresh air to house. Also as noted, pt (A) did not have any further sxs. However, pt (K) - caller's lungs were already compromised by having a cold, allergies, and asthma. Chloropicrin can potentially irritated resp system and aggravated existing conditions.

Caller very satisfied with data and stated she is a nurse and can understand this data.

cb prn.

Demographic information: Age: 52 Years Sex: Female Occupation (if relevant)	Exposure route: Inhalation Ocular	was adverse effect result of suicide/homicide or attempted suicide/homicide?	Was protective clothing work (specify)?  Not applicable
If female, pregnant?  DNQ	Was exposure occupational?  No  If yes, days lost due to illness:	Time between exposure and onset of symptoms:  See Symptoms	
Type of medical care sought: (examples include none, clinic, hospital emergency department, private physician, PCC, hospital inpatient). HCF	List signs/symptoms/adverse effects  Ocular Irritation/pain - 15 min or less, Lacrimation - 15 min or less, Respiratory irritation - 3 hrs or less, Shortness of breath - 3 hrs or less, Wheezing - 3 hrs or less,		If lab tests were performed, list test names and results (If available, submit reports)
Exposure data: Amount of pesticide: Exposure duration: Weight:			
Human severity category: HC			
Re-entry into a treated dwelling is n toxicity. Chloropicrin, a lacrimating	ot permitted until Vikane levels drop	n surrounding the incident. (add addition below 5 ppm, a level known to be well kane and may produce eye irritation as treed to the residence.	below the threshold for potential

Internal ID #
1-6720043

Voluntary Industry Reporting Form for 6(a)(2) Incident Information Involving Humans

		information involving Humans	
Demographic information: Age: 57 Years Sex: Male	Exposure route:  Ocular	is unknown, designate as such in appro Was adverse effect result of suicide/homicide or attempted	Was protective clothing worn (specify)?
Occupation (if relevant)		suicide/homicide?	Not applicable
If female, pregnant? <b>DNQ</b>	Was exposure occupational?  No  If yes, days lost due to illness:	Time between exposure and onset of symptoms:  See Symptoms	
Type of medical care sought: (examples include none, clinic, hospital emergency department, private physician, PCC, hospital inpatient). On-site	List signs/symptoms/adverse effects  Ocular Irritation/pain - 15 min or less , Lacrimation - 15 min or less ,		If lab tests were performed, list test names and results (If available, submit reports)
Exposure data: Amount of pesticide: Exposure duration: Weight:			
Human severity category:  HD			
toxicity. Chloropicrin, a lacrimating		below 5 ppm, a level known to be well b ane and may produce eye irritation and ned to the residence.	
			Internal ID # 1-6720043